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The limitations in claim 18 not disclosed by Hehl include the following:

1. a liquid distributor,
2. having a tapering drainage pipe in the shape of a nozzle.

The Examiner contends that component 2 is a nozzle. However, it is respectfully contended that component 2 of Hehl's multi-orifice injection nozzle is not a "drainage pipe" nor is it a nozzle. Component 2 is a "connector" (col. 2, line 29). Component 2 is connected to a number of additional components (see the figure), and is not a drainage pipe (which is a drainage outlet) in the shape of a nozzle as required by claim 18.

With respect to claim 22, the drainage pipe extends upwards from the bottom of the liquid distributor and comprises an inlet opening above the bottom of the liquid distributor. Such a configuration at the bottom of a distributor is not shown by Hehl.

The Examiner contends that connector 2 is a portion of the distributor. As discussed above, Hehl discloses an injection molding machine and not a liquid distributor. Moreover, opening "b" referred to by the Examiner clearly is not part of connector 2.

It is respectfully submitted that Hehl does not anticipate any of claims 18, 20, and 22. That is, Hehl is not an "enabling disclosure" which meets the test required in determining the quantum of prior art disclosure necessary to declare Applicants' invention "anticipated" under Section 102. The true test of any prior art relied on to show or suggest that a process is old or known is whether the prior art is such as to place that process in the possession of the public. In re Brown (CCPA 1964) 329 F2d 1066, 144 USPQ 245; In re Le Grice (CCPA 1962) 301 F2d 929, 133 USPQ 365; In re Arkley et al (CCPA 1972) 455 F2d 586, 172 USPQ 524. Further, for a prior art reference to anticipate a claimed invention, the reference must fully communicate the

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entire invention, in every detail, to the public. That is, the description must place the invention in the possession of the public as fully as if the art or instrument itself has been practically and publicly employed. In order to accomplish this, it must be so particular and definite, that from it alone, without experiment or the exertion of his own inventive skill, any person versed in the art to which it appertains could construct and use it. As stated in Sherman Industries, Inc. v. Proto-Vest Inc., 219 USPQ 256 (1983) and General Battery Corporation v. Gould, Inc., 215 USPQ 1007 (1982), there is no anticipation unless all of the same elements are found in exactly the same situation and united in the same way to perform an identical function.

In the present fact situation, Hehl does not disclose a liquid distributor, does not disclose a drainage pipe, and does not disclose a drainage pipe in the shape of a nozzle.

In paragraph no. 4 of the Final Rejection, claims 23-29 have again been rejected under 35 U.S.C. 102(b) as being anticipated by Ohlswager et al.

Ohlswager et al. teaches the use of a splash baffle in an apparatus for distributing a liquid-vapor mixture to a heat exchanger system or to different chemical reaction zones. The apparatus consists of a hollow vessel having a fluid inlet means, at least two hollow pipes each having a top opening located in the vessel, each pipe having an outlet in fluid communication with a different chemical reaction zone. There is a splash baffle located between the fluid inlet and the top of the pipes. The fluid enters the vessel impinging on the splash baffle located over the top of pipe opening thereby restricting the fluid entering the opening of the pipe (col. 3, lines 32-46). The splash baffle also acts to reduce the kinetic energy of the incoming fluid (col. 5, lines 53-55). The apparatus also contains a plate located between the splash baffle and the opening of the pipe ends. The incoming fluid flows over the plate, bypassing the top opening of

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the pipe. The plate further restricts the flow of fluid. The purpose of the splash baffle and the plate is to minimize the effects of surges of fluid thus maintaining a constant level of fluid by restricting the flow of fluid into the opening of the pipe ends. Ohlswager does not teach or suggest the use of the splash plate to prevent foreign matter from entering the pipe and fouling or clogging the system. Applicants' use of a hood is to prevent the distribution of the liquid from being affected by foreign substances which are lighter than the liquid and which therefore float on the surface. The foreign substances are trapped in and around the hood preventing fouling and clogging of the drainage pipe and the reactor tubes. The hood and its horizontal encircling annular gap provide for minimal flow resistance and the effective retention of soil. Ohlswager's use and purpose of the splash baffle and plate (the hood) are to control liquid surges and to provide a "fluid energy dissipation means". Nothing in the cited reference teaches or suggests the use of a hood to prevent foreign particles from entering a drainage pipe. As stated above, Applicants' purpose for use of the hood is to prevent foreign particles that float on the liquid from clogging the nozzle of the drainage pipe.

Claim 23 requires the presence of a hood with at least one opening. The Ohlswager plates 16 of Figure 1 do not contain any openings. The plate means 16 of Figure 3 is a perforated tray, but this perforated tray does not cover an inlet opening of a drainage pipe against the direct inflow of liquid as required by claim 23.

With respect to claim 28, the hood is divided by an annular inner wall having at least one opening, such that the drainage pipe is situated within said annular inner wall. Ohlswager does not disclose this embodiment.

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Concerning claim 29, Ohlswager does not disclose tapering drainage pipes, nor a preliminary distributor fitted into the main channel of a liquid distributor and wherein the base of the preliminary distributor extends over the drainage pipes.

Hence, it is respectfully contended that claim 23-29 are free from anticipation problems.

Claim 1-14 and 16-17, 19, 21 and 30 have been rejected under U.S.C. 103(a) as being unpatentable over Plachy in view of Dear et al (4,479,509; Figures 1 and 2).

The Examiner first refers to tapered portion 11 of drainage pipes 13-16. However, 11 is an "outlet weir" (see col. 4, line 49), also referred to as "lower notch 11" (see col. 5, line 67).

As stated in Applicants last response, the definitions of "weir" as "a fence or enclosure set in a waterway for taking fish". And "a dam in a stream to raise the water level or divert its flow" (pages 1319 and 1320 of Webster's New Collegiate Dictionary).

A weir is accordingly not a "drainage pipe having a cross-section, at the upper end of the drainage pipe, which tapers downward in the shape of a nozzle" (see claim 1). A weir is not a tapered section, and particularly not a notch in a drainage pipe, nor are the drainage pipes tapered downward.

Also, a weir is not a nozzle as required by claim 1 – see e.g. the above dictionary definitions of a weir.

The Examiner contends that a weir may be "defined as a 'vertical plate with a notch' through which fluid flows and not necessarily the narrower definition given by applicants in their response". However, the Examiner does not support this contention with any source material, while Applicants have provided a dictionary definition of "weir".

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Also as discussed in Applicants' last response, the inner wall of the nozzle is comprised of a material resistant to the adherence of solids. This is a limitation in the claim and defines the characteristics of the material comprising the inner wall of the nozzle. Plachy discloses no such material.

The Examiner contends that no patentable weight can be given to the limitation that the "nozzle is comprised of a material resistant to the adherence of solids."

However, the drainage outlets are in the form of drainage pipes having a cross-section – particularly at the upper end of the drainage pipe – which tapers in the shape of a nozzle with an inner wall made of a material resistant to the adherence of solids. By virtue of this special shape and also the special material at the narrowest point of the drainage pipe, the drainage pipe as a whole remains free from soil in the form of decomposition products on the inner walls which could affect the uniformity of distribution of the liquid through variation of the flow cross-section. Even after prolonged operation, no caking was observed on the inner walls of the drainage pipes as in other distribution systems. See pages 2, line 35 – page 3, line 6 of the specification.

According to the invention, the stream or liquid does not flow down the inner wall of the lower part of the drainage pipe, but instead freely downwards so that soil does not adhere, i.e. there is no reduction in cross-section which would ultimately result in blockage of the drainage pipe. The choice of the special material for the nozzle ensures that cracking products do not adhere to the inner walls of the nozzle.

With respect to the Dear reference (U.S. 4,479,509), this patent is directed to a "flow control valve" and not to a "liquid distributor" as required by the present claims.

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Component 16 of Dear relied on by the Examiner is a "seat ring" (col. 2, line 3) of unstated composition, designed "to receive the untapered end of plug 18" (col. 2, lines 3 and 4). This disclosure is respectfully submitted to be unrelated to the composition of the inner wall of a nozzle. Combining this disclosure with Plachy, even using hindsight, still does not change the nature of the inner wall of Plachy's drainpipes, nor does it relate to the inner wall of a nozzle.

Moreover, there is no teaching or suggestion in either reference for combining them. The criteria for a finding of prima facie obviousness are set forth in MPEP 706.02(j):

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria".

The initial burden is on the Examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the

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teachings of the references. Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter 1985).

With respect to the first criterion, there is no suggestion or motivation in the references to combine them, nor is there any knowledge generally available that would lead to their combination.

Concerning the second criterion, i.e. reasonable expectation of success, combining the references, even with the aid of hindsight, cannot result in the present invention for the reasons discussed above. Hence, there cannot be any reasonable expectation of success that the combined references will lead to the present invention.

With respect to the third criterion, the references do not teach or suggest all the claim limitations.

See further In re Gordon, 733 F2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) and cases cited therein. Merely because it is possible to find two isolated disclosures which might be combined in such manner to produce the claimed subject matter does not necessarily establish obviousness unless the art also contains "something to suggest the desirability of the proposed combination." In re Bergel, 292 F2d 955, 956-57, 130 USPQ 206, 208 (CCPA 1961). On the facts of the present case, it is respectfully submitted that the Examiner's proposed combination of references amounts to impermissible hindsight. The Examiner proposes lifting out-of-context disclosures from Dear and introducing them into Plachy, without an adequate suggestion of the desirability of doing so stemming from the prior art. Also, as discussed above, the present invention is still not obtained.

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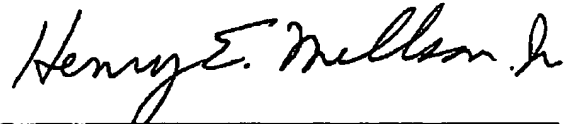
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In view of the above discussion, the Examiner is respectfully requested to allow claims 1-14 and 16-30.

Respectfully submitted,



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